EXECUTIVE SUMMARY

The Proposed Action analyzed in the Draft Environmental Impact Statement is implementation of the Puget Sound Chinook Harvest Resource Management Plan, jointly-developed by the Washington Department of Fish and Wildlife, and the Puget Sound treaty tribes, under Limit 6 of the Endangered Species Act (ESA) 4(d) Rule for the 2004–2009 fishing years, beginning May 1, 2004 (May 1, 2004 – April 30, 2010). The proposed Resource Management Plan would regulate commercial, recreational, ceremonial, and subsistence salmon fisheries potentially affecting the listed Puget Sound Chinook Salmon Evolutionarily Significant Unit within the marine and freshwater areas of Puget Sound, from the entrance to the Strait of Juan de Fuca inward. It excludes Washington Commercial Salmon Management Catch Reporting Area 4B during the months from May to September, when this area is under the jurisdiction of the Pacific Fisheries Management Council. Harvest objectives specified in the Resource Management Plan account for fisheries-related mortality of Puget Sound chinook salmon throughout the migratory range of this species – from Oregon and Washington to Southeast Alaska. The Resource Management Plan also includes implementation, monitoring, and evaluation procedures designed to ensure that fisheries are consistent with the objectives of the Resource Management Plan for conservation and use. Fishery activities under the Resource Management Plan would affect the listed Puget Sound Chinook Salmon and Hood Canal Summer-Run Chum Salmon Evolutionarily Significant Units. Salmon abundance is highly variable from year to year, both among chinook populations and other salmon species, requiring managers to formulate fisheries to respond to the population abundance conditions particular to that year. Therefore, the Resource Management Plan does not include the specific details of an annual fishing regime – i.e., where and when fisheries occur; what gear will be used; or how harvest is allocated among gears, areas, or fishermen. However, the Resource Management Plan does provide the framework and objectives against which the co-managers must develop their annual action-specific fishing regimes to protect Puget Sound chinook salmon and meet other management objectives.

The purpose and need for the Proposed Action (Section 1) is to provide for harvest of salmon species in Puget Sound marine and freshwater areas that:

- Ensures the sustainability of Puget Sound chinook salmon by conserving the productivity, abundance and diversity of the populations within the Puget Sound Chinook Evolutionarily Significant Unit
- Protects treaty Indian fishing rights and meets federal treaty trust responsibilities

- Provides equitable sharing of harvest opportunity among tribes, and among treaty and non-treaty fishers pursuant to U.S. v. Washington and U.S. v. Oregon
- Meets the requirement of Limit 6 of the 4(d) Rule under the Endangered Species Act (ESA) by: ". . . not appreciably reducing the likelihood of survival and recovery" of ESA listed Puget Sound chinook (50 CFR 223.203[b][6][i]).
- Manages risk associated with abundance estimation, population dynamics, and management implementation
- Optimizes harvest of abundant Puget Sound salmon (coho, chinook, sockeye, pink, chum) while protecting weaker commingled chinook stocks
- Accounts for all sources of fishery-related mortality
- Achieves the guidelines for allocation of harvest benefits and conservation objectives for chinook salmon under the Pacific Salmon Treaty.

Since the Puget Sound Chinook Evolutionarily Significant Unit was listed in 1999, the National Marine Fisheries Service (NMFS) has evaluated the impact of Alaskan, Canadian and southern U.S. salmon fisheries affecting listed Puget Sound chinook under section 7 of the ESA, and evaluated fisheries resource management plans in 2001 and 2003 for listed Puget Sound chinook under the 4(d) Rule Limit 6. National Environmental Policy Act (NEPA) reviews were also conducted on the 2001 and 2003 Resource Management Plans as part of the overall assessment of those Resource Management Plans. The current application of Limit 6 to the 2003 Resource Management Plan expires May 1, 2004.

Application of Limit 6 to the proposed Resource Management Plan would ensure that in conducting fishery activities, the co-managers would not be subject to ESA take prohibitions because these activities would be conducted in a way that contributes to conserving the listed Evolutionarily Significant Units, or would be governed by regulations that adequately limit impacts to listed salmon. For NMFS to apply the provisions of Limit 6 for implementing a Resource Management Plan, the co-managers must jointly prepare a fishing plan that meets the requirements defined under Limit 6 of the 4(d) rule. NMFS must then make a determination pursuant with the government-to-government processes of the Tribal 4(d) Rule that the Resource Management Plan, as proposed and implemented by the co-managers, does not appreciably reduce the likelihood of survival and recovery of listed Puget Sound chinook (50 CFR 223.203[b][6][i]). The NMFS determination under the 4(d) Rule is the major Federal action that triggers review under NEPA (NOAA Administrative Order 216.603(e)[2][a]).

Washington Trout, a Puget Sound environmental group, challenged the adequacy of the NEPA Environmental Assessment used by NMFS for its determination for the 2001 Puget Sound Chinook Harvest Resource Management Plan (Washington Trout v. Lohn, No. C01-1863R, Western District,

Washington). As part of the settlement agreement reached with Washington Trout (July 22, 2002), NMFS agreed to prepare an Environmental Impact Statement for its 2004 determination related to a long-term Resource Management Plan.

The alternatives considered and analyzed in this Draft Environmental Impact Statement were formulated based on scientific information, alternatives described in the settlement agreement in Washington Trout v. Lohn, and public comments received during the scoping process for the Environmental Impact Statement on the 2004 Puget Sound Chinook Harvest Resource Management Plan. Several alternatives suggested by the public were eliminated from further consideration because they did not meet the purpose and need of the Proposed Action or were contained within the alternatives that were considered in more detail. It should be noted that Alternative 4 is also inconsistent with several elements of the purpose and need for the Proposed Action, and would not be considered were it not one of the alternatives identified for analysis in the settlement agreement to Washington Trout v. Lohn. In the analyses, Alternative 4 provides an upper-bound estimate of the decrease in mortality on fish and wildlife species affected by Puget Sound salmon fisheries, and an upper-bound estimate of socio-economic effects. A description of the Proposed Action and alternatives is provided in Section 2, Alternatives Including the Proposed Action. The alternatives considered for detailed analyses are:

Alternative 1:	The Proposed Action (the proposed Resource Management Plan)
Alternative 2:	Escapement goal management at the management unit level with no restriction on where fisheries may take place
Alternative 3:	Escapement goal management at the individual population level with terminal fisheries only
Alternative 4:	No authorized take of listed Puget Sound chinook salmon within the Strait of Juan de Fuca and Puget Sound area.

NEPA requires disclosure of how current environmental and social conditions would change with the Proposed Action or its alternatives. For this analysis, the Proposed Action (Alternative 1) most closely approximates current salmon harvest management practices and baseline environmental conditions, because the same type of harvest management plan has been implemented since 2000–2001. Therefore, Alternative 1 is the baseline against which the environmental, social, and economic consequences of the action are compared. The predicted direct and indirect effects of alternatives on baseline environmental conditions (Alternative 1) are described in Section 4, Environmental Consequences,

along with predicted cumulative effects on the natural, built and human environment when combined with other related actions.

The predicted outcome of implementing any of the alternatives evaluated in this Draft Environmental Impact Statement will depend on the Puget Sound chinook salmon abundance available to the fisheries in any individual year, and the amount of Puget Sound chinook harvest taken in Canadian and Alaskan fisheries prior to chinook salmon reaching Puget Sound fisheries. Canadian fisheries, which are outside the jurisdiction of U.S. fishery management agencies, account for 25 to 80 percent of the fishing-related mortality for most chinook populations within Puget Sound. Each alternative was evaluated for four scenarios that captured the general range in magnitude of abundance and the level of Puget Sound chinook salmon harvest in Canadian and Alaskan fisheries that is reasonably expected to occur across the duration of the Proposed Action (the 2004–2009 fishing seasons), in order to capture the range of predicted impacts of the Proposed Action or alternative. A more detailed discussion of the basis and choice of these scenarios is presented in Subsection 4.2 of this Draft Environmental Impact Statement: Basis for Comparison of Alternatives and Approach to Alternatives Analysis.

Scenario	Abundance	Canadian/Alaskan Fisheries
Scenario A	2003 Puget Sound abundance	2003 Canadian/Alaskan fisheries harvest.
Scenario B	2003 Puget Sound abundance	High Canadian/Alaskan fisheries harvest.
Scenario C	30% reduction from 2003 abundance	2003 Canadian/Alaskan fisheries harvest.
Scenario D	30% reduction from 2003 abundance	High Alaskan/Canadian fisheries harvest.

The indications of a plateau or potential reduction in marine survival (the primary influence on abundance), and expectations that Canadian fisheries will continue to increase as they have in recent years, led the Interdisciplinary Team to conclude that Scenario B is the *most likely* to occur during implementation of the Proposed Action. However, the other scenarios followed the same general patterns of impact when comparing among alternatives for each resource.

The Draft Environmental Impact Statement examines the predicted effects of the Proposed Action and three alternatives on a range of issues including fish species (salmon and non-salmon), federal treaty trust responsibilities, subsistence use, economics, environmental justice and wildlife (Section 4, Environmental Consequences). From the information provided in this Draft Environmental Impact Statement, the Regional Administrator of the NMFS Northwest Region must decide:

1) Which harvest management strategy to adopt for salmon fisheries that take listed Puget Sound chinook salmon in Puget Sound and the Strait of Juan de Fuca that would meet the requirements for Limit 6 of the 4(d) take prohibition

2) If a harvest strategy other than that proposed by the co-managers is preferred, whether to limit the geographic location of salmon fisheries that take listed Puget Sound chinook within the Puget Sound Action Area.

CEQ Regulations (§1502.14[e]) require that the agency "Identify the [agency's] preferred alternative or alternatives, if one or more exists, in the draft [environmental impact] statement…unless another law prohibits the expression of such a preference." The Environmentally Preferable Alternative "ordinarily, means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural and natural resources" (CEQ 40 Most Asked Questions, No. 6a). The Preferred Alternative is the alternative NMFS believes best fulfills the purpose and need for the Proposed Action. The Preferred Alternative and the Environmentally Preferable Alternative need not be the same. NMFS may take into account various other considerations in choosing its Preferred Alternative, including such factors as the agency's statutory mission and responsibilities, and economic, environmental, technical, and social factors.

The following factors weighed most heavily in NMFS' decision concerning the Agency Preferred Alternative and the Environmentally Preferable Alternative: 1) effects on fish, and in particular the ESA-listed Puget Sound chinook salmon; 2) various levels of restriction on tribal treaty rights (from voluntary to mandated) and trust responsibilities, and the subsequent effects thereon; 3) treaty Indian ceremonial and subsistence uses; 4) various levels of environmental justice effects on Puget Sound tribes; 5) stable or increasingly adverse economic impacts to fishing communities; 6) secondary effects of fishing resulting from interactions of hatchery salmon that escape fisheries with wild salmon (i.e., straying); and 7) fishing-related impacts to fish habitat. For other resources evaluated in the Draft Environmental Impact Statement (wildlife, ownership and land use, water quality), there were no or very small differences among the alternatives, or uncertainty in the outcome precluded assessment of the effect (see Section 5, Identification of the Environmentally Preferable and Agency Preferred Alternative, for further details).

Alternative 1, the Proposed Action, is the NMFS' preferred alternative because NMFS believes this alternative would be most successful at balancing resource conservation, trust obligations to Native American tribes, promotion of sustainable fisheries and prevention of lost economic potential associated with overfishing, declining species and degraded habitats. NMFS did not choose Alternative 4, the Environmentally Preferable Alternative, as its preferred alternative due to: 1) the anticipated substantial adverse impacts to tribal treaty rights, treaty Indian ceremonial and subsistence fishing uses, environmental justice effects, and economic effects on fishing communities predicted for this alternative; 2) the expected reduction in adverse biological impacts from implementation of Alternative

4 were not predicted to be substantial enough to outweigh the losses in these other areas, particularly for listed Puget Sound chinook salmon; and 3) failure to achieve the purpose and need for the Proposed Action.

NEPA regulations and guidance indicate that agencies have discretion in choosing a preferred alternative different from the environmentally preferred alternative "based on relevant factors including economic and technical considerations and agency statutory missions" (40 CFR 1505.2[b]). NMFS has three primary mandates with regard to this Proposed Action: 1) implement the ESA; 2) carry out its federal trust responsibilities with Native American tribes, including protecting the exercise of federally-recognized treaty tribal fishing rights and; 3) provide for sustainable fishing opportunity. In addition, Presidential Executive Orders require that NMFS minimize conflicts between its implementation of the ESA and exercise of tribal activities (E.O. 13175), e.g., treaty reserved fishing rights, and fishing (E.O. 12962). The Secretarial Order (DOI Order 3206) requires that any restrictions of tribal fishing under the ESA 1) be reasonable and necessary for the conservation of the species at issue; 2) occur only when the conservation purpose of the restriction cannot be achieved by reasonable regulation of non-Indian activities; 3) be the least restrictive alternative available to achieve the conservation purpose; 4) not discriminate against Indian activities either as stated or implied; and 5) that voluntary tribal measures are not adequate to achieve the necessary conservation purpose. NMFS staff has proposed to conclude that Alternative 1 (the Proposed Action) would not appreciably reduce the likelihood of survival or recovery of listed Puget Sound chinook salmon[1]. Therefore, the further reductions in fisheries, and tribal fisheries specifically, that would occur with implementation of Alternative 2, 3, or 4 are not required to meet ESA requirements, and would represent an unreasonable and unnecessary constraint on the exercise of federally-recognized treaty fishing rights. In addition, the approach represented in Alternative 1 is more robust overall to management error and key uncertainties in environmental parameters (see Subsection 4.3.8, Fish: Indirect and Cumulative Effects) and therefore should better protect salmonid resources evaluated in the Environmental Impact Statement and better promote sustainable fishing opportunities.

Under the most likely scenario to occur over the duration of the Proposed Action (the 2004–2009 fishing seasons), implementation of Alternative 2, 3, or 4 is predicted to result in the loss of more than 94 percent of the local and regional sales, employment, and personal income generated by commercial

[1] NMFS' Proposed 4(d) Evaluation and Determination for the Puget Sound chinook resource management plan is currently undergoing public comment and review.

salmon fishing associated with the Puget Sound fishery. Reductions in sport fishing-related economic activity would range from 12 to 72 percent (see Subsection 4.6, Economic Activity and Value: Environmental Consequences). These predicted effects would be most severe in communities dependent upon commercial and sport fishing activities. Combined with substantial declines in fishing industries that these communities have already experienced over the past 20 years, these predicted effects would further affect the character and viability of these communities, especially tribal communities (see Subsections 4.5, Treaty Indian Ceremonial and Subsistence Salmon Uses: Environmental Consequences; and 4.7, Environmental Justice: Environmental Consequences). The primary basis for the identification of Alternative 4 as the Environmentally Preferred Alternative was the increased abundance in fish species. Alternative 4 (as well as Alternative 2 or 3) would provide for substantially larger escapements of salmonids, larger abundance of forage fish, and a slightly greater possibility of rebuilding some individual listed Puget Sound chinook populations more quickly. However, given the discussion above, it is unclear what realistic effect this would have on the status of salmonid populations. NMFS has tentatively concluded that Alternative 1 will meet ESA requirements. Management objectives for the other salmonid species are also predicted to be met. Since Alternative 1 also provides for the conservation needs of these resources, NMFS does not consider the predicted reduction in adverse biological impacts from the implementation of Alternative 4 substantial enough to outweigh the significant economic losses that would be prevented under Alternative 1.

Finally, NEPA regulations require that the selected alternative be consistent with the purpose and need for the Proposed Action. Alternative 4 would be inconsistent with several elements of the purpose and need for the Proposed Action, and would not have been considered were it not one of the alternatives identified for analysis in the settlement agreement to Washington Trout v. Lohn. It would not: 1) provide for the meaningful exercise of federally protected treaty fishing rights; 2) provide for tribal and non-tribal fishing opportunity co-managed under the jurisdiction of U.S. v Washington; or 3) optimize harvest of abundance of Puget Sound salmon while protecting weaker commingled chinook salmon stocks.